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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/982,612	10/18/2001	Kang G. Shin	UOM 0216 PUSP	8256
22045	7590	03/10/2005	EXAMINER	
BROOKS KUSHMAN P.C. 1000 TOWN CENTER TWENTY-SECOND FLOOR SOUTHFIELD, MI 48075			BHATIA, AJAY M	
			ART UNIT	PAPER NUMBER
			2145	

DATE MAILED: 03/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/982,612

Applicant(s)

SHIN ET AL.

Examiner

Ajay M Bhatia

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 10/18/2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1/21/2003.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Oath/Declaration***

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not identify the mailing address of each inventor. A mailing address is an address at which an inventor customarily receives his or her mail and may be either a home or business address. The mailing address should include the ZIP Code designation. The mailing address may be provided in an application data sheet or a supplemental oath or declaration. See 37 CFR 1.63(c) and 37 CFR 1.76.

It does not identify the city and either state or foreign country of residence of each inventor. The residence information may be provided on either on an application data sheet or supplemental oath or declaration.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 9-10 and 19-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. The term "substantially" in claims 9-10 and 19-20 is a relative term that renders the claims indefinite. The term "substantially" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one

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of ordinary skill in the art would not be reasonably apprised of the scope of the invention. For the purposes of this office action "substantially" will treat as any value greater than or equal to one, a proper correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-7, 9-17, and 19-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Engel et al. (U.S. Patent 6,519,636, referred to as Engle).

5. For claim 1, Engle teaches, a method for controlling network traffic to a network computer which provides network computer services, the method comprising:  
measuring capacity of the network computer to service the network traffic to obtain a signal; (see Engle, Col. 6 lines 17-26 and 44-55)  
providing a set of rule data which represents different policies for servicing the network traffic; (see Engle, Col. 4 lines 49-59)

selecting a subset of the rule data based on the signal; and (see Engle, Col. 7 line 41 to Col. 8 line 17)

throttling the network traffic to the network computer based on the selected subset of the rule data wherein services provided by the network computer are optimized without overloading the network computer. (see Engle, Col. 8-18-25, Col. 8 line 43 to Col. 9 line 43)

6. For claim 2, Engel teaches, the method as claimed in claim 1 wherein the network computer is a server and wherein the network traffic includes requests for service from network clients over the network. (see Engle, Col. 12 lines 52-62, denial of service is an attack by use of SYN request, which is a type of request for service)

7. For claim 3, Engel teaches, the method as claimed in claim 2 wherein the network is the Internet and the server is an Internet server. (see Engle, Col. 6 lines 16-44, Col. 7 lines 13-22)

8. For claim 4, Engel teaches, the method as claimed in claim 1 wherein the network traffic includes denial of service attacks. (see Engle, Col. 12 lines 52-62)

9. For claim 5, Engel teaches, the method as claimed in claim 1 further comprising organizing the set of rule data in at least one multi-dimensional coordinate system. (see

Engle, Col. 7 lines 41 to Col. 8 line 17, a hash with a bucket implementation is inherently a multi-dimensional coordinate system)

10. For claim 6, Engel teaches, the method as claimed in claim 5 wherein the capacity of the network computer includes load components or load component indices and wherein the dimensions of the at least one multi-dimensional coordinate system corresponds to the load components or load component indices (see Engle, Col. 7 lines 41 to Col. 8 line 17, the use of address, port, flow parameter, control parameter, state parameters, socket, and protocol data with the use of the hash function inherently correspond to the load component indices)

11. For claim 7, Engle teaches, the method as claimed in claim 1 further comprising the step of classifying network traffic to the network computer to obtain a plurality of traffic classifications and wherein the step of throttling is based on the plurality of traffic classifications. (see Engle, Col. 8 line 43 to Col. 9 line 43)

12. Claims 11-17 and 19-20 list all the same elements of claims 1-7 and 9-10, but in system form rather than method form. Therefore, the supporting rationale of the rejection to claims 1-7 and 9-10 applies equally as well to claims 11-17 and 19-20.

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13. Claims 1-6, 9-16, and 19-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Chen Y. W. (Study on the Prevention of SYN Flooding by Using Traffic Policing).

Regarding independent claims 1 and 11, (e.g., exemplary independent claim 1)

14. For claim 1, Chen Y.W. teaches, a method for controlling network traffic to a network computer which provides network computer services, the method comprising: measuring capacity of the network computer to service the network traffic to obtain a signal; (see Chen Y.W., page 595-596 section 2.1 )

providing a set of rule data which represents different policies for servicing the network traffic; (see Chen Y.W., pages 597-599 section 3)

selecting a subset of the rule data based on the signal; and (see Chen Y.W., pages 597-599 section 3)

throttling the network traffic to the network computer based on the selected subset of the rule data wherein services provided by the network computer are optimized without overloading the network computer. (see Chen Y.W., pages 597-599 section 3)

15. Regarding dependent, 2-6, 9-10, 12-16, and 19-20, the limitations of these claims are inherent to the features with in Chen Y. W.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 8 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Engel in view of Haddock et al. (U.S. Patent 6,104,700).

17. For claim 8, Engel fails to clearly disclose, the method as claimed in claim 1 wherein the selected subset of rule data represents quality of service differentiations and wherein the network traffic is throttled so that the network computer provides quality of service differentiation.

Haddock et al. teaches, the method as claimed in claim 1 wherein the selected subset of rule data represents quality of service differentiations and wherein the network traffic is throttled so that the network computer provides quality of service differentiation. (see Haddock, Col. 3 lines 35-45, Col. 8 line 57 to Col. 9 line 15)

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to integrate Haddock's method of creating Quality of Service rule with the rule based server of Engel in order to increase the amount of control over the network the Network manager or network administrator has and/or to improve the service



for media. (see Haddock et al., Col. 2 lines 23-30, Col. 1 lines 23-31) and (see Engle, Col. 1 line 26-50)

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


1. US-6,023,456 by Chapamn et al.
2. US-6,535,227 by Fox et al.
3. US-6,789,203 by Belissent, Jacques E.
4. US-6,801,503 by Wetherall et al.
5. US-2002/0131366 by Sharp et al.
6. US-2002/0143948 by Maher et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ajay M Bhatia whose telephone number is (571)-272-3906. The examiner can normally be reached on M-F 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Valencia M Wallace can be reached on (571)-272-6159. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AB

  
VALENCIA MARTIN-WALLACE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700